Langley DAAC User Working Group

Chair: Joel Levine, NASA Langley Research Center Co-Chair: Cora Randall, LASP, U. of Colorado

Represented by Jennifer Francis, Rutgers University

Our raison d'être

- Provide liaison between DAAC personnel and scientific community
- Assist DAAC in reaching scientific goals
- Propose and evaluate new data sets for inclusion in the DAAC
- Recommend modifications and new utilities to enhance data access by users
- Provide user input on data set, software, and service priorities
- Provide "user sounding board" for issues related to website design, data formats, processing requirements, product organization, distribution systems, software tools, etc.
- Provide input and additional communication between DAAC and EOS investigator teams
- Facilitate coordination with user community, EOSDIS Program, and others

Membership

- => UWG members are selected from the community of scientists who provide and/or require data sets distributed by the Langley DAAC.
- => Members have expertise in the following relevant areas: remote sensing, atmospheric radiation, cloud-radiation interactions, aerosols, and atmospheric chemistry and physics, as well as outreach and data management.
- Members are asked to serve for a minimum of 3 years. New members are proposed by existing members and are invited by the Chair(s) to join.

Present membership (primary expertise):

Aerosols: 3
Radiation and clouds: 4
Chemistry and physics: 4
Remote sensing: 2
Data management: 2
Outreach: 3
Total: 18

Relationship with DAAC personnel

The UWG feels its relationship with the DAAC is highly constructive and amiable. The DAAC is responsive to our questions, requests, recommendations, and criticisms. We feel that both the DAAC and the user community benefit from regular DAAC/UWG interactions.

Recent activities, concerns, issues

- Long-term data archival (letter sent to NASA HQ)
- Data charging policy (position paper)
- Nomination of new data sets
- Data formats (e.g., HDF, binary, NetCDF)
- User interactive bulletin board
- Evaluation of website -- online ordering, data set information, browse capabilities
- Recommendations for DAAC performance metrics (e.g., user satisfaction surveys, DAAC acknowledgement in publications)
- Enhancements to data access, e.g., subsetting, multi-sensor collocation
- New DAAC tools -- demo, beta-test
- Invited speaker series to facilitate interactions among DAAC personnel and scientific users
- Outreach activities

User experiences with Terra data distribution system (+ indicates compliment, – indicates shortcoming)

MODIS/MISR user (via EDG -- public and MISR versions)

- (+) Ordering system worked well, provided that swath and/or time is known
- (–) Collocating MODIS/MISR data (wants CERES, too). User has to find MISR swath times on LDAAC, order MISR data, then go to MODIS page to look for same times as MISR swaths and order MODIS.
- (-) No file naming convention (contributes to above), e.g., MISR and MODIS supposedly overlapping files:
 - MISR_AM1_GRP_ELLIPSOID_GM_P015_O004446_DA_05.hdf MOD021KM.A2000292.1730.002.2000305114338.hdf
- (-) LDAAC apparently overloaded -- large chunks of MISR data cannot be processed
- (-) Tools to request overlapping MISR/MODIS data at a lat/lon fail
- (–) Tracking calibration changes difficult for MISR and MODIS

MODIS user (via EDG, I think)

- (+) Data are easy to select, well-designed website
- (-) Long delay to availability
- (-) Lack of tools to read, calibrate, project data

MISR User and team member -- ordered via LDAAC

- (+) Overall very pleased
- (+) Easy to learn how to use ordering tool
- (+) FTP-pull works well, "only a few orbits vanished" (!)
- (+) Local granule ID helps on table of data sets
- (+) Excellent user support by DAAC
- (-) Hard to order a particular orbit
- (–) Cumbersome and time comsuming if ordering many granules -- e.g., have to indicate distribution method for each one. Suggestion: have default distribution method for frequent users
- (-) Need better user-DAAC communication regarding changes to distribution system (downtimes for software modification, etc)
- (-) Difficult to order collocated data from multiple sensors

MISR & MODIS Team member

- (+) Excellent support from DAAC
- (-) Nearly impossible to find and order collocated products from different sensors on same platform
- (-) Lack of clean visual interface in EDG
- (-) Lack and poor quality of MISR browse data
- (-) Ordering system for MISR data not intuitive
- (-) Steep learning curve for new users to handle MISR data (e.g., ENVI/IDL cannot handle level 1b2 block data and understand how to stitch together)

MODIS user

- (+) Easy to figure out how to order
- (+) Good communication of caveats regarding data set
- (+) Order ready promptly via ftp, but ftp-pull site was down for several days after expiration date of order
- => suggestions: Date selection should give available range for that sensor. Order receipt doesn't say what will happen next -- should say that message will arrive when data are ready for ftp.
- (-) EDG hard to find via NASA homepage -- should have direct link

Questions from a science team data producer

- Do users want beta versions of data asap or wait for calibrated/validated data set?
- How do users want producers to convey quality information? Changes in procedures?
- Should "low-hanging fruit" be accessible to nonscience-team members? Can a reasonable proprietary period be set?
- Should there be rules for citing data set producers [and distributors?]?